

**Amendments to the Claims:**

This listing of claims replaces all prior versions and listings of claims in the application.

**Listing of Claims:**

1       Claim 1. (*Original*) An apparatus, comprising:  
2            a direct memory access register adapted to hold a descriptor, said register comprising:  
3              a command register comprising a compare enable bit and a branch enable bit;  
4              a source address register;  
5              a target address register; and  
6              a descriptor address register.

1       Claim 2. (*Currently Amended*) An apparatus as in claim 1, wherein said compare enable  
2       bit is adapted to indicate a comparison operation to be performed by ~~said~~ a direct memory access  
3       controller based on said source address register and said target address register.

1       Claim 3. (*Currently Amended*) An apparatus as in claim 1, wherein said branch enable bit  
2       is adapted to indicate a branch operation to be performed by ~~said~~ a direct memory access  
3       controller to access another descriptor.

1       Claim 4. (*Original*) An apparatus as in claim 1, further comprising a control status  
2       register, said control status register comprising a compare status bit.

1       Claim 5. (*Currently Amended*) An apparatus as in claim 4, wherein said branch enable bit  
2    is adapted to indicate a branch operation to be performed by ~~said~~ a direct memory access  
3    controller to access another descriptor based on said compare status bit.

1       Claim 6 (*Withdrawn*) A system, comprising:  
2       a target;  
3       a source;  
4       a memory adapted to contain a first descriptor of a first type, a second descriptor of a  
5    second type, a third descriptor of a third type, and a fourth descriptor of said first type;  
6       a direct memory access controller coupled to said memory, said direct memory access  
7    controller adapted to transfer data from said source to said target based on said first descriptor,  
8    said direct memory access controller comprising a direct memory access register to hold said  
9    first descriptor, said second descriptor, or said third descriptor, said direct memory access  
10   register comprising a command register comprising a compare enable bit and a branch enable bit.

1       Claim 7. (*Withdrawn*) A system as in claim 6, said direct memory access register further  
2    comprising a source address register and a target address register.

1       Claim 8. (*Withdrawn*) A system as in claim 7, wherein said compare enable bit is adapted  
2    to indicate a comparison operation to be performed by said direct memory access controller  
3    based on said source address register and said target address register.

1           Claim 9. (*Withdrawn*) A system as in claim 6, wherein said branch enable bit is adapted  
2        to indicate a branch operation to be performed by said direct memory access controller to fetch  
3        said fourth descriptor or said third descriptor from said memory.

1           Claim 10. (*Withdrawn*) A system as in claim 9, wherein said first descriptor is adapted to  
2        indicate data transfer by said direct memory access controller, and wherein said third descriptor  
3        is adapted to indicate no data transfer by said direct memory access controller.

1           Claim 11. (*Withdrawn*) A system as in claim 6, said direct memory access controller  
2        further comprising a control status register, said control status register comprising a compare  
3        status bit.

1           Claim 12. (*Withdrawn*) A system as in claim 11, wherein said branch enable bit is  
2        adapted to indicate a branch operation to be performed by said direct memory access controller  
3        to fetch said fourth descriptor or said third descriptor from said memory based on said compare  
4        status bit.

1           Claim 13. (*Withdrawn*) A system as in claim 11, wherein said direct memory access  
2        controller is adapted to perform a comparison operation and a branch operation based on said  
3        branch enable bit, said comparison enable bit, and said compare status bit.

1           Claim 14. (*Withdrawn*) A machine-readable medium that provides instructions, which  
2   when executed by a computing platform, cause said computing platform to perform operations  
3   comprising a method of:  
4           fetching a first descriptor of a first type, said first descriptor identifying a first source and  
5   a first target;  
6           transferring a first data set over a direct memory access channel from said first source to  
7   said first target based on said first descriptor;  
8           fetching a second descriptor of a second type, said second descriptor identifying a second  
9   source, said second descriptor comprising comparison data;  
10          fetching data from said second source identified by said second descriptor;  
11          comparing said data fetched from said second source and said comparison data to obtain  
12   a comparison result; and  
13          fetching one of a fourth descriptor of said first type and a third descriptor of a third type  
14   based on said comparison result.

1           Claim 15. (*Withdrawn*) A machine-readable medium as in claim 14, wherein said fourth  
2   descriptor is fetched if said comparison result indicates said data fetched from said second source  
3   fails to match said comparison data.

1       Claim 16. (*Withdrawn*) A machine-readable medium as in claim 14, wherein said third  
2       descriptor is fetched if said comparison result indicates said data fetched from said second source  
3       matches said comparison data.

1       Claim 17. (*Withdrawn*) A machine-readable medium as in claim 14, wherein said second  
2       descriptor comprises a branch enable bit and a comparison enable bit, wherein said comparing  
3       data fetched is based on said comparison enable bit in said second descriptor, and said fetching  
4       one of said fourth descriptor and said third descriptor is based on said branch enable bit in said  
5       second descriptor.

1       Claim 18. (*Withdrawn*) A machine-readable medium as in claim 14, wherein said data  
2       fetched from said second source comprises a transfer status indicator.

1           Claim 19. (*Withdrawn*) A method, comprising:  
2           fetching a first descriptor of a first type, said first descriptor identifying a first source and  
3           a first target;  
4           transferring a first data set over a direct memory access channel from said first source to  
5           said first target based on said first descriptor;  
6           fetching a second descriptor of a second type, said second descriptor identifying a second  
7           source, said second descriptor comprising comparison data;  
8           fetching data from said second source identified by said second descriptor;  
9           comparing said data fetched from said second source and said comparison data to obtain  
10          a comparison result; and  
11          fetching one of a fourth descriptor of said first type and a third descriptor of a third type  
12          based on said comparison result.

1           Claim 20. (*Withdrawn*) A method as in claim 19, wherein said fourth descriptor is fetched  
2          if said comparison result indicates said data fetched from said second source fails to match said  
3          comparison data.

1           Claim 21. (*Withdrawn*) A method as in claim 19, wherein said third descriptor is fetched  
2          if said comparison result indicates said data fetched from said second source matches said  
3          comparison data.

1           Claim 22. (*Withdrawn*) A method as in claim 19, wherein said second descriptor  
2   comprises a branch enable bit and a comparison enable bit, wherein said comparing data fetched  
3   is based on said comparison enable bit in said second descriptor, and said fetching one of said  
4   fourth descriptor and said third descriptor is based on said branch enable bit in said second  
5   descriptor.

1           Claim 23. (*Withdrawn*) A machine-readable medium as in claim 19, wherein said data  
2   fetched from said second source comprises a transfer status indicator.